

Table 1. Annual Respondent Burden and Cost
NESHAP for Pulp and Paper Production
(40 CFR Part 63, Subpart S)

Burden Item	(A) Hours Per Occurrence (Technical hours)	(B) Number of Occurrences Per Respondent Per Year	Emissions Testing Cost Per Occurrence	(C) Hours Per Respondent Per Year (C=AxB)	(D) Number of Respondents Per Year (a)	(E) Technical Hours Per Year @\$64.60 (Cx D)	(F) Management Hours Per Year @\$95.32 (Ex 0.05)	(G) Clerical Hours Per Year @\$40.09 (Ex 0.1)	(H) Total Cost Per Year
1. Applications	Not applicable								
2. Surveys and Studies	Not applicable								
3. Reporting Requirements									
A. Read and Understand Rule Requirements (MACT I Mills) (b)	40	1	\$0	40	7 c,d	280	14	28	\$20,545
B. Read and Understand Rule Requirements (MACT III Mills) (b)	20	1	\$0	20	0 c,d	0	0	0	\$0
B. Required Activities									
1.1) Pulping processes (Non-Sulfite)									
a) Provide documentation that vent streams are introduced to the flame zone of a boiler, lime kiln, or recovery furnace, or	24	1	\$0	24	4 c,e	96	5	10	\$7,044
b) Provide documentation that the control incinerator is operating at a minimum level of 1600 F and 0.75 sec residence time, or	60	1	\$0	60	1 c,f	60	3	6	\$4,403
c) Performance test of control device - test method 308	24	1	\$14,000	24	1 c,f,g	24	1	2	\$1,761
1.2) Pulping Processes (Sulfite)	24	1	\$14,000	24	0 c,g,i	0	0	0	\$0
Performance test of control device - test method 308									
2.1) Bleaching process vent scrubber (MACT I Mills) - Choice of									
a) Provide documentation of scrubber operating parameters or previous performance tests results, or	60	1	\$0	60	4 c,j	240	12	24	\$17,610
b) Performance test of scrubber or control device - test method 26A	24	1	\$10,000	24	0 c,g,j	0	0	0	\$0
2.2) Bleaching process vent scrubber (MACT III Mills) - Choice of									
a) Provide documentation of scrubber operating parameters, or previous performance test results, or	60	1	\$0	60	0 c,j	0	0	0	\$0
b) Performance test of scrubber or control device - test method 26A	24	1	\$10,000	24	0 c,g,j	0	0	0	\$0
3.1) Pulping wastewater treatment (Non-Sulfite)									
a) Performance test of condensate segregation and control device (test method 305), or	24	1	\$16,000	24	4 c,h,k	96	5	10	\$7,044
b) Performance test of biotreatment unit - test method 304	24	1	\$11,000	24	2 c,h,l	48	2	5	\$3,522
3.2) Pulping wastewater treatment (Sulfite)									
Performance test of control device - test method 305	24	1	\$16,000	24	0 c,h,m	0	0	0	\$0
Repeat of performance test									
1) test method 308 - pulping	24	1	\$14,000	24	0 c,g,n	0	0	0	\$0
2) test method 26A - bleaching	24	1	\$10,000	24	0 c,g,n	0	0	0	\$0
3) test method 305 - kraft pulping ww	24	1	\$16,000	24	1 c,h,n	24	1	2	\$1,761
4) test method 304 - kraft pulping ww	24	1	\$11,000	24	0 c,h,n	0	0	0	\$0
5) test method 305 - sulfite pulping ww	24	1	\$16,000	24	0 c,h,n	0	0	0	\$0
Initial/Annual inspection (enclosures, closed vent, wastewater conveyance system)- test method 21	8	1	\$3,000	8	87 o	696	35	70	\$51,069
Monthly visual inspection of enclosures, closed vent system, and wastewater conveyance system.	4	12	\$0	48	130 d	6,240	312	624	\$457,860
C. Create Information	Included in 3.B								
D. Gather Information	Included in 3.B								
E. Report Preparation									
Initial Notification Report	16	1	\$0	16	0 c,d	0	0	0	\$0 <45 day after promul.
Notification of compliance status	16	1	\$0	16	0 c,d	0	0	0	\$0
Initial Compliance Strategy Report	40	1	\$0	40	0 c,p	0	0	0	\$0
Compliance Strategy Report Update	16	1	\$0	16	27 p	432	22	43	\$31,698
Semi-annual summary report	16	2	\$0	32	137 d	4,384	219	438	\$321,676
Continuous monitoring/Exceedance reports	24	2	\$0	48	21 q	1,008	50	101	\$73,962
Notification of performance test	4	1	\$0	4	24 c,r	96	5	10	\$7,044 >75 day before test
Notification of construction/reconstruction	4	1	\$0	4	21 c,s	84	4	8	\$6,164 >180day beforehand
Notification of actual startup	4	1	\$0	4	21 c,s	84	4	8	\$6,164 <150 day after startup
4. Recordkeeping Requirements									
A. Read Instructions	Included in 3.A								
B. Plan Activities	Included in 3.B								
C. Implement Activities	Included in 3.B								
D. Develop Record System	40	1	\$0	40	0 c,d	0	0	0	\$0

E. Record information										
Records of continuous monitoring for operating parameters	2	52	\$0	104	137	d	14,248	712	1,425	\$1,045,447
Records of periodic inspections (monthly visual inspections and annual method 21)	Included in 3.B									
Record startups, shutdowns, and malfunctions	4	12	\$0	48	137	d	6,576	329	658	\$482,514
F. Personnel Training	Not applicable									
G. Time for audits	8	2	\$0	16	137	d	2,192	110	219	\$160,838
Total:							36,908	1,845	3,691	\$2,708,125

TOTAL INDUSTRY BURDEN SUMMARY:

Total annual labor hours	42,444
Annual costs in dollars	\$2,708,125

Footnotes

- a Values are rounded
- b MACT I Mills include kraft, sulfite, soda, and semi-chemical operations. MACT III Mills include mechanical, non-wood, and secondary fiber operations.
- c One-time activity. In out years, after initial compliance date, assume that 5% of mills affected as a result of unexplained exceedances.
- d Performed by all mills. (130 MACT I Category Mills, 338 Stand-alone MACT III category mills)
Assume all MACT I category mills will be affected by this rule. Assume the only MACT III category mills that will be affected by this rule are the stand-alone mills with chlorine bleaching (Available information estimates that only 2% of stand-alone MACT III category mills have chlorine bleaching processes (2% of 338 = 7, After initial compliance assessment 331 mills are not impacted.))
Total number of mills affected by this rule is $130 + 7 = 137$
- e Estimated that 66.7% of mills will use a recovery boiler, power boiler, or lime kiln for control of pulping vents. There are 122 non-sulfite pulping mills. (66.7% of 122 = 81)
- f Estimated that 33.3% of mills will use incineration for pulping lines (16.7% will provide acceptable design specs (14), and 16.7% will conduct performance tests (14))
- g Estimate includes test plan, test report, and parametric monitoring setup. Method 308 tests for pulping lines and method 26A tests for bleaching lines.
- h Estimate includes test plan, test report, and parametric monitoring setup. Method 304 and 305 are for wastewater streams.
- i Assume that all 8 sulfite pulping mills will conduct performance tests.
- j 94 MACT I category mills have bleaching lines. 90% will provide acceptable performance specs or previous test results (85), 10% will conduct performance tests (9)
Assume 2 percent of stand-alone MACT III category mills have bleaching lines (2% of 338=7). 90% will provide acceptable performance specs or previous test results (6)
10% will conduct performance tests (1).
- k Estimated that each kraft mill has one pulping wastewater control device. Of the 108 kraft mills, 28 already have steam strippers in use, and of the 28, all are assumed to conduct condensate segregation and performance tests. Of the 80 mills without control, 35 will use biotreatment control and, 45 will install steam strippers. Facilities installing new steam strippers are assumed to perform initial condensate segregation and performance tests. Facilities installing new biotreatment control will perform initial performance tests.
- l Estimated that each kraft mill has one pulping wastewater control device. Assumed 33% will use biotreatment. (33% of 108 = 36) Per footnote "c," 5 % of 36= 2.
- m Assume sulfite mills will monitor gas scrubber parameters and use Water-8 Model for emission estimates.
- n Assumed that 15% of performance tests are failed and need to be repeated.
- o Initial and annual activity. Assumed that EPA is notified each year of the testing. Assumed 2/3 of all MACT I mills have positive pressure points in their vent systems and will have to test using method 21 ($2/3 \times 130 = 87$).
- p Assume that 25% of all kraft mills are still required to submit compliance strategy reports (25% of 108 kraft mills = 27 affected kraft mills) in order to comply by 2006.
- q Assumed that 15% of all affected mills during any one quarter will be required to submit an exceedance report in addition to the summary report. (15% of 162 = 24)
- r EPA must be notified of all tests including repeat performance tests. ($(130 \times .05 = 7) \quad 7 \times 1.15 \times 3 = 24$) (see footnotes c and q)
- s Assumed 15% of all affected mills conduct construction or reconstruction per year. (15% of 137 = 21)